

REMARKS

Claims 1-24 and 26-37 are pending in the application. Claims 1-23, 26-34, and 36-37 stand withdrawn pursuant to a restriction requirement. Claim 25 is cancelled without prejudice. Favorable reconsideration in light of the amendments and the remarks which follow is respectfully requested.

I. The Amendments

Claim 24 is amended to incorporate the features of dependent claim 25.

II. Rejection of Claims 24, 25, and 35 Under 35 U.S.C. § 103(a)

Claims 24, 25, and 35 stand rejected under 35 U.S.C. § 103(a) over Saulle et al (*Animal Sci.* 77, 3398-99 (1999)) in view of Lowe et al (*Nuc. Acid Res.*, 18, 1757-61 (1990)).

The Examiner asserts that the claimed primer sequences are known sequences taught by Saulle et al. However, Saulle et al does not teach the claimed primer sequences for priming/hybridizing DNA derived from cattle, sheep, goat or deer.

SEQ ID NO: 3 recites the 18mer sequence 5'-ACRTCAACRTGACTKACA, where R is A or G and K is G or T. The consensus sequence for the three sequences from Figure 1 of Saulle et al appears to be 5'-ACRTCAACRTGACTYACA (bases 151-168). The 15th position of SEQ ID NO: 3 is K signifying guanine or thymine. The 15th position of the 18mer consensus sequence from Saulle et al is Y signifying cytosine or thymine. As such, Saulle et al does not teach the claimed SEQ ID NO: 3 for priming/hybridizing DNA derived from cattle, sheep, goat or deer.

SEQ ID NO: 4 recites the 19mer sequence 5'-TCTGGRTTGTGRTARAAGT. The reverse complement of SEQ ID NO: 4 is the sequence 5'-ACTTYTAYCACAAAYCCAGA, where Y is thymine or cytosine. The consensus sequence of the three sequences from Figure 1 of Saulle et al appears to be 5'-AYTTYAYYYWYAACCCAGA (bases 260-278), where W signifies A or T. That

is, Saulle et al teaches that position no. 14 of the reverse-complement sequence is C in all cases; the equivalent position in the non-reversed SEQ ID NO: 4 is R at position number 6. SEQ ID NO: 4 is R at position 6, and the reverse complement of SEQ ID NO: 4 is Y at position 14. Again, Saulle et al teaches that position number 14 of the reverse complement is C while the equivalent position at base number 6 of SEQ ID NO: 4 is R (position number 14 of the reverse complement of SEQ ID NO: 4 being Y). As such, Saulle et al does not teach the claimed SEQ ID NO: 4 for priming/hybridizing DNA derived from cattle, sheep, goat or deer.

Accordingly, the Examiner's position that Saulle et al. teaches a known sequence comprising the claimed primer sequence is not correct. The claimed primer pairs whose sequences are shown by SEQ ID NOS: 3 to 6 employ the specific region of the ATPase 8 gene where they can anneal and the specific mixed bases such as K and R at the specific position in their sequences confers the ability to detect or prime any DNAs derived from cattle, sheep, goat and deer and not to detect or prime the DNAs derived from non-ruminant animals. Saulle et al does not teach or suggest that the sequences of the claimed primer pairs consist of the sequences in the specific region of the ATPase 8 genes and have the specific mixed bases at the specific position, and with the help of the computer program of Lowe et al the claimed primer pairs could not be obtained from the ATPase 8 sequences of Saulle et al by those skilled in the art.

Therefore, it is respectfully requested that the rejection of claims 24 and 35 under 35 U.S.C. § 103(a) be withdrawn.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063. Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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